

Application No.: 09/981,608  
Filed: October 16, 2001  
Inventor(s): Thomas E. Tahan  
Title: COMMUNITY ACCESS  
CONTROL IN A MULTI-  
COMMUNITY NODE

                              April 11, 2006  
Signature                      Date

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5,265,221 (hereinafter "Miller") and U.S. patent 6,772,350 (hereinafter "Belani"). The following clear errors in the Examiner's rejection are noted.

In paragraph 2 of the present Office Action, it is suggested that Miller-Belani discloses all of the features of claim 1. In particular, it is stated that Miller discloses a:

"CIB (col. 2, lines 42-47) includes: a user community set (UCS) for each user of said MCN (col. 2, lines 47-52), an application community set (ACS) for application on said MCN, and an object set (OCS) for each object residing within said MCN (Miller, col. 2, lines 52-62)."

However, Applicant submits these features are not disclosed by the cited art. For example, with respect to claim 1, the cited art does not disclose at least the features:

"consulting a community information base (CIB) responsive to said request, wherein said CIB includes:  
a user community set (UCS) for each user of said MCN;  
**an application community set (ACS) for each application on said MCN; and**  
an object community set (OCS) for each object residing within said MCN".

As seen from the above, claim 1 recites multiple community sets associated with different types of entities - a UCS for each user, an ACS for each application, and an OCS for each object. In contrast, Miller discloses storing information about subjects, objects, verbs, rules, and definitions. For example, Miller discloses:

"In the embodiment shown in FIG. 2, the subject memory 204 stores user information in a logical matrix having a specific user on each row, with **user attributes**, i.e. data pertaining to the specific user, in each field (column). The object memory 206 stores **object names and object attributes and optionally object rules** for defined verbs. The verb memory 208 stores **verb names with a default rule for each verb name**. The rule memory 210 stores **rule names with their associated boolean expressions**. The definition memory 212 stores **field definitions, external function declarations, and strings**. The evaluator 202, coupled to the subject memory 204, object memory 206, verb memory 208, the rule memory 210 and the definition memory 212, allows or disallows access of the user 102 to the entity 106 according to the specified verb, specified default rule, and user and object attributes." (Miller, col. 4, lines 14-30, emphasis added).

“The user window, shown in FIG. 3, is used to display and update user names and user attributes. Columns in this window can be used to specify the user's group(s), the role(s) or general attributes. The information displayed by the user window of FIG. 3 corresponds to the data stored in subject memory 204.” (Miller, col. 7, lines 63-68)

“Objects that are today felt to be necessary to protect are records, blocks, pages, segments, files, directories, directory trees, programs, and processes, as well as fields, processors, video displays, clocks, printers, communications, devices, etc.” (Miller, col. 1, lines 30-34)

As may be seen from the above, Miller discloses storing user attributes in the subject memory including the user's groups. Miller also discloses storing object attributes in the object memory, and that an object may be a process or a program. However, Miller defines the contents of the object memory to be “object names and object attributes and optionally object rules for defined verbs.” Even were one to equate a community set with a group, it is noted that Miller does not disclose storing groups as attributes of objects, processes, or programs in the object memory. Applicant finds no teaching or suggestion in Miller of a “CIB ... [that] includes ... an application community set (ACS) for each application on said MCN; and an object community set (OCS) for each object residing within said MCN,” as is recited in claim 1. Accordingly, Applicant submits claim 1 is patentably distinct from the cited art for at least the above reasons.

In addition to the above, in paragraph 2 of the present Office Action, it is stated that Miller discloses “a processing unit configured to ... permit access to said object in response to detecting ... an ACS of said process is a superset of said OCS (col. 5, lines 39-62). However, Applicant submits that these features are not disclosed by the cited art. For example, with respect to claim 1, the cited art does not disclose the features:

“permitting access to said object in response to detecting:  
said request is from a user; and  
a UCS of said user is a superset of an OCS of said object; and

permitting access to said object in response to detecting:  
said request is from a **process**; and  
**an ACS of said process is a superset of an OCS of said object.**"

Claim 1 recites two distinct access control mechanisms, one responding to a request from a user and one responding to a request from a process. In contrast, Miller, discloses access control for **users, but not for processes**. Miller discloses:

"the subject memory 204 stores user information in a logical matrix having a specific user on each row, with user attributes, i.e. data pertaining to the specific user, in each field (column)." (Miller, col. 4, lines 14-18).

It is noted that the subject memory of Miller stores *user* information, not object, process, or application information. As disclosed by Miller:

"Discretionary access control mechanisms are in the most reduced sense binary decisions: a subject is either allowed or not allowed to perform some action on some object. This concept can be stated as follows: the sentence "**Subject may Verb Object**" is **either true or false**. A general discretionary access control mechanism, therefore, should have subjects, verbs, and objects as inputs to a boolean expression evaluator, as disclosed herein." (Miller, col. 7, lines 28-36 emphasis added).

While Miller discloses access control to objects from users, Miller does not separately disclose access control to objects from processes. In contrast, claim 1 refers to "permitting access to said object in response to ... a request from a process." It is noted that a "process" is different from a "user" as each is recited independently in claim 1. Accordingly, Applicant finds no teaching or suggestion in Miller of "permitting access to said object in response to detecting said request is from a process and an ACS of said process is a superset of an OCS of said object" as is recited in claim 1. Applicant submits claim 1 is patentably distinct from the cited art for at least these additional reasons.

As each of independent claims 10, 18, and 26 include similar features, each of these claims are patentably distinct for reasons similar to that of claim 1. Likewise, as each of dependent claims 2-6, 9, 11-15, 17, 19-23, 25, 27-31, and 34 includes at least the

features of the above independent claims upon which it depends, each of dependent claims 2-6, 9, 11-15, 17, 19-23, 25, 27-31, and 34 is believed patentable as well.

In light of the foregoing remarks, Applicants submit the application is in condition for allowance, and notice to that effect is respectfully requested. If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Applicant hereby petitions for such an extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 501505/5181-75800/RDR.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☒ Notice of Appeal
- ☒ Fee Authorization

Respectfully submitted,



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